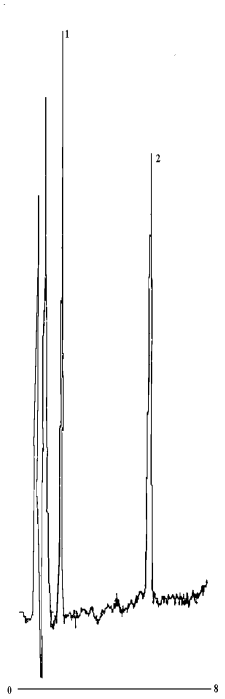
HPLC

application note

Benzidine Separation Using Glassy Carbon Electrode (3 mm) with ppb Sensitivity

'...the sample preparation in this case consists of filtering of the sample, followed by injection...'

Peak 1: Benzidine (10 ppb)
Peak 2: 3,3'-Dichlorobenzidine (25 ppb)



Conditions

Column:	Spherisorb 5 µ OD S2 (C18), 150 x 4.6 mm ID
Temperature:	Ambient
Mobile Phase:	50% 0.1 M Sodium Acetate (pH 4.7) with 50% Acetonitrile
Flow Rate:	1.5 ml/min
Electrode:	3 mm Glassy Carbon
Potential	800 mV (Ag/Ag/Cl)

This application illustrates the use of the patented impinging wall jet electrochemical detector. Most environmental applications require extractions and derivative formation to ensure sensitivity and selectivity. This detector removes labour intensive sample preparation required for other electrochemical detectors. This can mean up to a days labour saving. The sample preparation in this case consists of filtering of the sample, followed by injection. When sample throughput is required, this application can save the commercial clinical laboratory hundreds of dollars per run.

Key Features

- Sensitivity
- Cost savings
- Selectivity
- New patented technology
- Limited technical expertise

Relevant Industries

- Commercial environmental laboratories
- EPA laboratories
- CLP
- Industrial monitoring laboratories
- Water quality laboratories
- Water treatment laboratories
- Landfill monitoring laboratories

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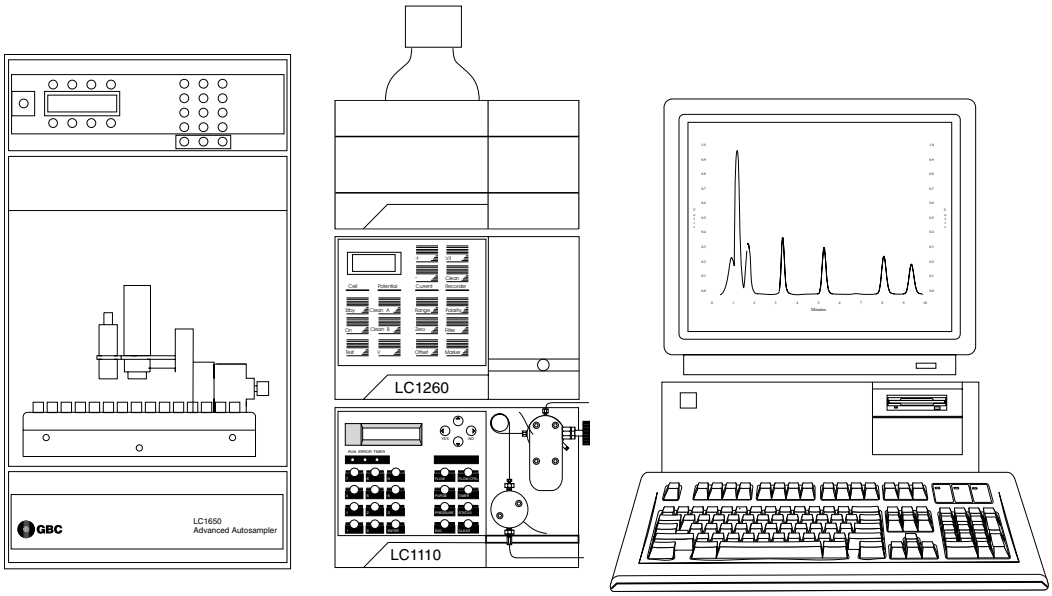
GBC HPLC Instrumentation

LC1110 Dual Piston HPLC Pump
LC1260 Electrochemical Detector
LC1445 System Organiser
LC1650 Advanced Autosampler
WinChrom Chromatography Data Management System



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